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YEARS **IBEC**<sup>R</sup>

Institute for Bioengineering of Catalonia



**Jobs** February 23, 2026

## Predoctoral researcher at the Nanoprobes and Nanoswitches Research Group

Introduction to the vacant position:

The [Nanoprobes and Nanoswitches Group](#) is looking for a predoctoral researcher to develop a basic project to investigate quantum phenomena in photosynthetic electron transport chains. The contract will be within the framework of the research line in nanoprobes, whose objective is to investigate the nanoscale interactions between biomolecules relevant for biological processes.

### Main tasks and responsibilities:

- Perform experiments in electrochemistry of redox proteins and photosynthetic complexes (photochronoamperometry, voltammetry, impedance spectroscopy)
- Perform experiments in electrochemical tunneling microscopy and spectroscopy of redox proteins and photosynthetic complexes

- Carry out structure-based computational calculations of the protein reactivity and molecular interactions to interpret the experimental results

### **Requirements for candidates:**

#### Essential:

- Bachelor's and master's degrees in chemistry, physics, nanoscience and nanotechnology, or equivalent.
- Knowledge of nanoscale techniques (specifically on tunneling microscopy, interfacial electrochemistry, surface science) is a plus.
- Multidisciplinary qualifications (Physics/Math's, Physics/Engineering, etc.) are a plus.
- Computational chemistry and data analysis skills are a plus.
- Competencies and skills: Communication, Teamwork and collaboration, Commitment, Proactivity, Integrity, Critical and Analytical thinking.
- High level of English

#### Advantageous:

- Experience in materials characterization techniques.
- Experience in protein overexpression and purification.

### **Competencies and Skills:**

We value not only technical expertise but also the demonstration of core competencies such as Communication, Teamwork and Collaboration, Commitment, Proactivity, Integrity, and Critical and Analytical Thinking.

### **We Offer:**

- Number of available positions: 1
- Starting date: March 16st, 2026
- Working conditions:
  - *Full time 3-year contract renewable up to 4 years upon satisfactory progress towards completion of PhD thesis.*
  - Measures to reconcile work and family life (parental leave, flexible schedule working hours, 23 working days of paid holidays, 9 leave days for personal matters, among others).
- IBEC ensures equality of access to [professional development opportunities](#) irrespective of employment status, length at IBEC or other factors. The IBEC's yearly training catalogue offers a wide range of training in technical and transferable skills including mobility grants and a Mentoring programme for predoctoral and postdoctoral researchers.
- Stimulating, interdisciplinary research and high-quality international scientific environment.
- Induction programme to facilitate incorporation at IBEC and additional support is provided for foreigners to obtain Visa-working permit and to install in Barcelona.

### **How to apply:**

**Until March 8<sup>th</sup>, 2026** an [online application form](#) is available through IBEC dedicated site: <https://careers.ibecbarcelona.eu/>

Only those applications submitted before the deadline will be evaluated.

### **Reference: Phd-PG.**

If you have any further question regarding your application, please contact us at [jobs@ibecbarcelona.eu](mailto:jobs@ibecbarcelona.eu)

## **Principles of the selection process:**

IBEC is committed to the principles of the Code of Conduct for the Recruitment of Researchers of the European Commission and the Open, Transparent and Merit based Recruitment principles (OTM-R) <https://ibecbarcelona.eu/careers-at-ibec/jobs/>

IBEC's Commitment on equal opportunity:

Our strength and excellence as an international transdisciplinary Research Institute are based on diversity. Being an equal opportunity employer, we are committed to diversity and inclusion, so that we support employees irrespective of their gender, nationality, religion, disabilities, age, sexual identity or cultural and socioeconomic background".

Visit our devoted webpage on [Equality, Diversity and Inclusion](#).

IBEC actively looks for female candidates for Senior positions ensuring that at least 40% of shortlisted applicants invited to interview have to be women with comparable level of CVs as the male candidates. At the end of the evaluation process, in case of equal merit, priority will be given to female candidates.

For candidates with children that come from outside Barcelona, we offer babysitting services during the interview, so you don't have to worry about anything else than doing a good interview. Contact us if you are interested in this service.

IBEC, as a signatory of the San Francisco Declaration on Research Assessment (DORA), will consider, especially for early-stage investigators, much more the scientific content of research outputs, than publication metrics or the identity of the journal in which it were published.

## **Protection of personal data:**

IBEC guarantees that candidates' personal data are processed in accordance with the requirements of the EU General Data Protection Regulation (GDPR) and Law 3/2018 on Data Protection.

Personal data will be processed solely for the purposes of the selection process.

## **Who we are?**

The Institute for Bioengineering of Catalonia, IBEC is an interdisciplinary research center focused on Bioengineering and Nanomedicine based in Barcelona. IBEC is one of the top research institutions named as a Severo Ochoa Research Centre by the Ministry

of Science, Universities and Innovation, which recognizes excellence at the highest international level in terms of research, training, human resources, outreach and technology transfer.

IBEC's mission is to develop international high-quality interdisciplinary research that, while creating knowledge, contributes to making a better quality of life, improving health and creating wealth. A close link with key universities, reference hospitals and corporations, are assets that facilitate achieving the mission.

IBEC was established in 2005 by the Generalitat de Catalunya (Autonomous Government of Catalonia), the University of Barcelona (UB) and the Technical University of Catalonia (UPC).

IBEC is located within the Barcelona Science Park and is managing 3.800 square meters facilities, with an annual budget of 22 Mio€; 4.150 square meters of facilities; 21 research groups and a team of researchers and support services of 400 people from 35 different countries. [www.ibecbarcelona.eu](http://www.ibecbarcelona.eu)



## HR EXCELLENCE IN RESEARCH

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